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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,670	04/18/2005	Johannes Boppel	W1.2163 PCT-US	1819
7590 Douglas R Hanscom Jones Tullar & Cooper P O Box 2266 Eads Station Arlington, VA 22202		07/13/2007	EXAMINER TAWFIK, SAMEH	
			ART UNIT 3721	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,670

Applicant(s)

BOPPEL ET AL.

Examiner

Sameh H. Tawfik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42,45-47,49,51,53,55,57,59,61,63,67,70,72,74,77,84,88 and 90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42,45-47,49,51,53,55,57,59,61,63,67,70,72,74,77,84,88 and 90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 42, 45-47, 49, 51, 53, 55, 57, 59, 61, 63, 67, 70, 72, 74, 77, 84, 88, and 90 rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. (DE 198 29 095).

Lang discloses a former of a web-processing machine comprising: a longitudinal web former support body (via former 1) first and second leg areas (Fig. 1; via pipes 6, 7, and 12-15; note that the leg areas are capable of supporting web as well) of the web former support body (via 6, 7, 12-15 are part of former plate 1); the first and second leg areas each having a rigid, air permeable leg area support surface and being adapted to both concurrently engage a web being longitudinally folded (Figs. 1 and 2; via bores 2 and 3); the first and second leg areas of the former support body converging with respect to each other at an acute angle (Figs. 1 and 2; via former plate's nose section and pipes at 12-15 form acute angle); a nose section of the support body, the nose section of the support body being located at a convergence of said first and second converging leg areas of the support body (via the nose section of former plate 1), the nose section of the support body having a rigid air permeable nose support surface (via nose section at the lower portion of Fig. 1 with permeable means 12-15) adapted to engage the web being longitudinally folded by the longitudinal web formed support body, see for example Figs. 1 and 2; a first surface layer of a micro-porous air permeable material on said support surface of each

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of said first and second converging leg areas of the web former support body (via former plate 1 with inner bores 2 and 3 along the edges) the first surface layer having a plurality of micro-openings of open pores of said micro-porous air permeable material for the exit of a fluid under pressure, see for example (Fig. 1; via 2 and 3) and having a first fluid permeability per unit of area; and a second surface layer of a micro-porous air permeable material on said support surface of said nose section (Fig. 1; via 12-15), the second surface layer having a plurality of micro-openings of open pores of said micro-porous material for the exit of fluid under pressure, see for example (Fig. 1) and having a second fluid permeability per unit of area.

Lang does not have the first and second coating of the micro porous material with diameter of less than 500 μm nor the second fluid permeability being greater than the first fluid permeability. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Lang's former with having the first and second coating of the micro porous material with diameter of less than 500 μm and the second fluid permeability being greater than the first fluid permeability, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 45: Lang does not disclose that the pores have a mean diameter of 5 to 50 μm . However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Lang's former with having the pores diameter of 5 to 50 μm , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

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Regarding claims 46 and 47: the porous material is an open pored sinter material/mtal, see for example (Figs. 1 and 2; via air pipes). Note that it is inherent such pipes are metal pipes.

Regarding claim 49: a load bearing support body enclosing a hollow space (via 1); the coatings being a layer on the support body (via pipes being a layer in the support body 1).

Regarding claim 51: including a support surface (via inner surface of 1) connected with the coating and having a plurality of openings adapted to supply fluid to the coating (via pipes with openings supplying fluid to 1).

Regarding claim 53: Lang does not disclose that the coating has a thickness between 0.05 mm and 0.3 mm. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Lang's former with having the coating has a thickness between 0.05 mm and 0.3 mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claim 55: the support body (1) has a plurality of passages.

Regarding claim 57: the support body has a wall supporting the coating, note that it is inherent such former discloses a frame/wall to support via 1.

Lang, does not disclose that the wall thickness of greater than 3 mm. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Lang's former with having the wall thickness of greater than 3 mm, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

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Regarding claim 59: wherein said support body (1) is a porous material having an air permeability greater than said micro-porous material (Figs. 1 and 2).

Regarding claim 61: wherein the support body includes a flat material including the hollow space (Figs. 1 and 2; via 1 has a flat surface).

Regarding claim 63: wherein in the leg area the support body is a tube provided with passages (Figs. 1 and 2; it is inherent that 1 shaped as tube by the edges).

Regarding claim 67: Lang does not disclose that the micro openings allow passage of 1 to 20 standard cubic meters of air per hour. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Lang's former with having the micro openings allow passage of 1 to 20 standard cubic meters of air per hour, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claims 70, 72, and 74: a feed line adapted to feed fluid to the former (Figs. 1 and 2; via 8-11). Lang does not disclose that the porous material is charged with an excess pressure of at least 1 bar/4 bar nor the feed line having an interior area of less than 100 mm square. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Lang's former with having the porous material is charged with an excess pressure of at least 1 bar/4 bar and the feed line having an interior area of less than 100 mm square, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

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Regarding claims 77 and 79: wherein said micro-openings are formed in an insert releasably secured to a support on said former, see for example (Figs. 1 and 2).

Regarding claim 84: further including a first hollow chamber adapted to supply said leg area with fluid (via 8 and 9) and a second hollow chamber adapted to supply said nose section with fluid (via 10 and 11).

Regarding claim 88: wherein a pressure in said first hollow chamber is different from a pressure in said second hollow chamber; note that it is inherent such pressure in 8 and 9 could be different than the pressure in 11 as by controlling the valves.

Regarding claim 90: Lang does not disclose an air exit rate in said leg area is between 2 to 15 standard cubic meters per m² and an air exit rate in said nose section is between 7 and 20 standard cubic meters per m² and further wherein said nose section air exit rate is greater than said leg area air exit rate. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Lang's former with having an air exit rate in said leg area is between 2 to 15 standard cubic meters per m² and an air exit rate in said nose section is between 7 and 20 standard cubic meters per m² and further wherein said nose section air exit rate is greater than said leg area air exit rate, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Conclusion

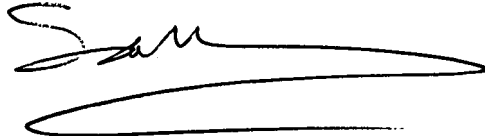
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is 571-272-4470. The examiner can normally be reached on Tuesday - Friday from 9:00 AM to 7:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sameh H. Tawfik
Primary Examiner
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A handwritten signature in dark ink, appearing to read 'Sameh', followed by a long, horizontal, slightly wavy line that extends to the right.

ST.